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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BASOM, BLAINE T

ART UNIT PAPER NUMBER

2173

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/661,598

Applicant(s)

NAKAJIMA, SATOSHI

Examiner

Blaine Basom

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,10-12,15,19-21,25-27,30,34-36 and 40-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,10-12,15,19-21,25-27,30,34-36 and 40-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

The Examiner acknowledges the Applicant's amendments to claims 1, 3-5, 10-12, 15, 19-21, 25-26, 30, 34, and 40-41, in addition to the Applicant's cancellation of claims 2, 6, 13-14, 17-18, 28-29, 31-33, and 43-44. In response to these amendments and cancellations, the objections to claims 1, 2, 10, 11, 15, 26, and 30, presented in the previous Office Action, have been overcome. Moreover, the 35 U.S.C. §101 rejections of claims 15, 17-21, and 25, as presented in the previous Office Action, have been withdrawn in light of the Applicant's present amendments and cancellations. The Examiner respectfully notes, however, that the Applicant's amendments have caused additional objections to various claims, as is more fully described below.

Regarding the pending claims, the Applicant submits that WML ("Wireless Application Protocol Wireless Markup Language Specification"), as described in the previous Office Action, provides display content for navigation, i.e. state transitions, but which is not user-defined. The Applicant particularly submits that the WML "DO element," which is employed to facilitate user directed navigation, has a representation which is "user agent dependent" and not defined by the user interface designer. Accordingly, the Applicant argues that WML fails to teach at least one display cell definition defining both a state transition and content which with a user interacts to cause the transition, as is expressed by each of the pending claims. The Examiner, however, respectfully disagrees with this argument for the following three reasons:

(1) Although the visual appearance of a user interface widget representing a WML DO element is user agent dependent, the widget may still be considered to be defined by the DO

Art Unit: 2173

element, and by any element comprising the DO element. The WML DO element specifies the existence of the widget, as for every DO element there is a corresponding widget; if no DO element is associated with a WML card, then that card will not have such a widget. In fact, in order to add a widget to a first card for navigating to a second card, the interface designer adds a DO element to the WML document defining the first card. A DO element thus identifies a widget to be created, and accordingly, a DO element is considered to define the widget.

(2) A WML DO element explicitly defines content with which the user interacts for navigational purposes. A WML DO element may comprise a "LABEL" attribute, which specifies text that to be employed in labeling the above-described widget (see section 9.6 of the WML specification). This defined content (i.e. the labeled widget) is interacted with by a user to navigate to another card.

(3) Besides the DO element, other WML elements may be employed to define content with which the user may interact to navigate to other cards. For example, an "A element" specifies a link which may be selected to navigate to another card (see section 9.7 of the WML specification). As another example, a "SELECT element" may comprise an "OPTION" element that generates an "ONCLICK" event when selected (see sections 11.6.2.1 and 11.6.2.2). Such an ONCLICK event may specify a URL to which to navigate (See sections 9.8 and 11.6.2.2). In other words, the SELECT element defines a list of one or more options from which the user may choose, whereby the option associated with the ONCLICK event, when selected, causes navigation to another card.

Accordingly, the Applicant's arguments have been fully considered, but are not persuasive.

Claim Objections

Claims 1, 10, 25, 26, and 30 are objected to because of the following informalities: In claim 1 the phrases, "an user interface," and "at least one of the display cell definition," are grammatically incorrect. In claim 10 the phrase, "that the display state of the user interface to be the said next display state" is considered grammatically incorrect. Regarding claim 25, the phrase, "the first instantiation of the user interface a user's interacted with," is considered grammatically incorrect. As per claim 26, the phrase, "with at least one of the display cell definition" is considered grammatically incorrect. In claim 30 the phrase, "a first instantiations" is considered grammatically incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 10, there is no antecedent basis for "the content of the display cell," which is recited twice in the claim. Regarding claim 25, there is no antecedent basis for "the first display state definition."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6, 10-12, 15, 19-21, 25-27, 30, 34-36, and 40-42 are rejected under 35

U.S.C. 102(b) as being anticipated by the Wireless Markup Language (WML), as described by the “Wireless Application Protocol Wireless Markup Language Specification,” Version 10-Apr-1998 (hereafter referred to as “the WML specification”). In general, WML is a markup language that is used for specifying content and user interfaces for “narrowband devices,” such as cellular phones, pagers, and personal digital assistants (for example, see section 1, on page 5 of the WML specification). It is understood that WML is implemented on the World Wide Web to define such user interfaces, which like web pages, are transmitted from a remote server to the user’s narrowband device (for example, see section 5, on page 10).

Specifically regarding claims 1 and 30, WML employs a “deck” and “card” organizational metaphor (for example, see section 1, on page 5). A WML card specifies a single unit of user interaction, i.e. a display screen, and is therefore considered to correspond to a display state of a user interface. A WML card may contain, for example, information to present to the user and instructions for gathering user input (see the definition of “Card,” provided in section 4.1 on page 8). A plurality of such WML cards may be grouped together and transmitted, as a single deck, from a remote server to the user’s narrowband device (for example, see section 1, on page 5). As such, WML cards are transmitted in advance to the narrowband

Art Unit: 2173

device, before they are required to be displayed. Each WML card may comprise a plurality of displayed elements, considered “cells” like those of the claimed invention. For example, a card may comprise an “INPUT element,” which specifies a text entry object for the user to input data to the application (see section 11.6.3 on pages 35-37). A card may further comprise text and images to display to the user (for example, see sections 11.8 and 11.9 on pages 39-44). While viewing a WML card, the user may navigate to another card in the same deck, or may navigate to another card in a different deck (for example, see section 1, on page 5). Specifically, a card may comprise a “SELECT element” which defines a list of one or more options from which the user may choose, some of which may be chosen to cause navigation to another card (see section 11.6.2 on pages 32-35, and section 9.8 on page 21). Moreover, a card may comprise a “DO element,” which may be implemented to generate a widget to navigate to other cards within the deck (for example, see section 9.4.1 on page 17, see section 9.6 on pages 19-21, and see section 11.2.1 on page 27). A user agent, such as a browser on the user’s narrowband device, implements the display features and functionality of each WML card (for example, see the definition of “User Agent,” provided in section 4.1 on page 8), and is therefore understood to determine which card to display in response to such user input. A narrowband device implementing a WML user interface thus entails: receiving, from a remote server, a deck having a plurality of WML cards, each card defining an instantiation of the user interface corresponding to a display state of the user interface, each card having one or more elements, which are considered display cell definitions correspondingly defining one or more display cells of an instantiation of the user interface, with each element defining content and at least one of the elements, such as a SELECT element or a DO element, having a transition rule defining a next

Art Unit: 2173

display state, i.e. card, of the user interface to transition to, when a user interacts with the content; determining locally by the client device a next display state of the user interface based on at least in part on the transition rule of the element defining content interacted with by the user; and provisioning by the client device a next instantiation of the user interface in accordance with one or more of the display state definitions, i.e. cards, associated with the determined next display state. Accordingly, the WML specification teaches a method like that of claim 1. A narrowband device implementing such a method is considered a client device, like that recited in claim 30.

As per claims 3-4, each WML card may comprise a plurality of displayed elements, as is described above. For example, a card may comprise an "INPUT element," which specifies a text entry object for the user to input data to the application (see section 11.6.3 on pages 35-37). A card may further comprise text and images to display to the user (for example, see sections 11.8 and 11.9 on pages 39-44). As further described above, such a card corresponds to a display state of a user interface, and an element of a card corresponds to a display cell definition, which defines a display cell of the associated display state. Accordingly, WML teaches provisioning a next instantiation of the user interface in accordance with one or more display state definitions, i.e. a card, by generating a display cell in accordance with a display cell definition, i.e. an element, of the card associated with the next display state. As each card may comprise a *plurality* of elements, such provisioning is further understood to comprise generating another display cell of the next instantiation of the user interface in accordance with another display cell definition, i.e. element, of the same card associated with the next display state.

Concerning claims 5 and 34, a deck of WML cards may comprise a "TEMPLATE" element which may specify various functional and display characteristics for all cards in the deck (for example, see section 11.4 on pages 29-30, and section 11.5.2.1 on page 32). Each card may inherit such display and functional characteristics, or override them (for example, see section 9.5 on pages 18-19). It is understood that such a "TEMPLATE" element, not being a card, is not displayed, and therefore, a template element is considered a "pseudo instantiation," like that claimed. Accordingly, the WML specification teaches generating by the user's narrowband device a portion of the first and next instantiations of the user interface with constituting contents inherited from a pseudo instantiation of the user interface, as is expressed in claims 5 and 34.

With respect to claims 6 and 35, a WML card corresponds to a display state of a user interface, as is described above. As further described above, a card may comprise a "DO" element to generate a widget to navigate to other cards within the deck. In response to selecting the widget, the user's narrowband device determines a current card to display in response to the user input, or in other words, determines a current display state. As such a card may not only be specified by a deck, but also a location within the deck (for example, see section 5.2 on page 10, and section 11.2.1 on page 27), its corresponding display state is considered "multidimensional" like recited in claims 6 and 35.

Regarding claim 36, the above described narrowband, i.e. client, device may be a wireless telephone or a palm-sized computing device (for example, see section 4.3 on page 9 of the WML specification).

With respect to claims 10 and 40, the WML specification, due to the reasons described above, is considered to teach: provisioning locally by a client device a first instantiation of a user

Art Unit: 2173

interface of an application for a current display state of the user interface in accordance with first one or more display state definitions, i.e. a card, defining the first instantiation of the user interface for the current display state of the user interface, each of the one or more display state definitions including one or more display cell definitions, i.e. elements, correspondingly defining one or more display cells of the first instantiation of the user interface, with at least one of the one or more display cell definitions, e.g. a DO element, having a transition rule defining a next display state to transition to, when the content of the display cell is interacted by a user; determining locally by the client device the next display state based on a user's interaction with the content of a display cell of the first instantiation of the user interface, and in accordance with the corresponding display cell definition; and provisioning by the client device the next instantiation of the user interface corresponding to the determined next display state of the user interface, in accordance with second one or more display state definitions, i.e. a second card, separate and distinct at least partially from the first one or more display state definitions, defining the next instantiation of the user interface. Accordingly, the WML specification teaches a method like that of claim 10. A narrowband device implementing such a method is considered a client device, like that described in claim 40.

As per claim 11, 26, and 41, the WML specification, due to the reasons described above, is considered to teach: transmitting by a server to a remote client device, a first one or more display state definitions, i.e. a card, defining a first instantiation of a user interface of an application for a first display state of the user interface, each of the first one or more display state definitions including first one or more display cell definitions, i.e. elements, correspondingly specifying first constituting contents for first one or more display cells of the first instantiation of

Art Unit: 2173

the user interface, with at least one of the first one or more display cell definitions including a first transition rule specifying a first next state to transition to, when a user interacts with the content of the corresponding display cell; transmitting by the server to the remote client device, the first constituting contents for the first one or more display cells for rendering the first instantiation of the user interface on the remote client device in accordance with the first one or more display state definitions; transmitting further in advance by the server to the remote client device, second one or more display state definitions, i.e. a second card, separate and distinct at least partially from the first one or more display state definitions, defining a corresponding second instantiation of the user interface for a second display state of the user interface, each of the second one or more display state definitions having second one or more display cell definitions specifying second constituting contents for a second one or more display cells for the second instantiation of the user interface, with at least one of the second one or more display cell definitions including a second transition rule specifying a second next display state to transition to, e.g. a display state, when a user interacts with the content of the corresponding display cell; and transmitting further in advance by the server to the remote client device, the second constituting contents for the second one or more display cells for rendering the second instantiation of the user interface on the remote client device in accordance with the second one or more display state definitions. Accordingly, the WML specification teaches a method like that of claim 11. A server implementing such a method is considered a server like that described in claims 26 and 41.

Referring to claims 12, 27, and 42, the WML specification, due to the reasons described above, is considered to further teach: transmitting by the server to the remote client device third

Art Unit: 2173

constituting contents of a pseudo instantiation of the user interface, the pseudo instantiation specified by a "TEMPLATE" element, whereby the third constituting content is inherited while rendering first and second instantiations of the user interface, in accordance with corresponding first and second cards.

Concerning claims 15 and 21, the user's narrowband device, because of the reasons described above, is considered to necessarily comprise: a first plurality of programming instructions stored on a storage medium and configured to implement a user interface provision function equipped to determine a current display state for a user interface of an application, and to provision a current instantiation of the user interface in accordance with a first one or more display state definitions, i.e. a first card, associated with the determined current display state, to determine a transition rule of a display cell definition, i.e. element, of a display state definition, the display cell definition further defining content of a display cell interacted by a user, and to provision a next instantiation of the user interface in accordance with second one or more display state definitions, i.e. a second card, separate and distinct at least partially from the first one or more display state definitions, defining the next instantiation of the user interface corresponding to the determined next display state. Accordingly, the narrowband device, configured to receive and display WML cards, is considered an "article of manufacture" like that of claim 15. A user agent, such as a browser on the user's narrowband device, implements the display features and functionality of each WML card (for example, see the definition of "User Agent," provided in section 4.1 on page 8). Accordingly, the user interface provision function is considered part of a browser like recited in claim 21.

As per claim 19, the WML specification, due to the reasons described above, is understood to teach provisioning a current instantiation of a user interface by generating a portion of the current instantiation with constituting contents inherited from a pseudo instantiation, specified by a "TEMPLATE" element.

Concerning claim 20, the WML specification is considered to teach multi-dimensional display states, as is described above.

With respect to claim 25, the user's narrowband device, because of the reasons described above, is considered to necessarily comprise: a plurality of programming instructions stored on a storage medium and configured to implement a user interface provision function equipped to provision a first instantiation of a user interface of an application in accordance with first one or more display state definitions, i.e. a first card, defining the first instantiation of the user interface corresponding to a current display state of the user interface, to determine a next display state of the user interface based on a transition rule of a display cell definition, i.e. element, which also defines content of a display cell of the first instantiation of the user interface a user interacted with, and to provision a next instantiation of the user interface in accordance with second one or more display state definitions, i.e. a second card, separate and distinct at least partially from the first one or more display state definitions, defining the next instantiation of the user interface corresponding to the next display state of the user interface. Accordingly, the user's narrowband device, configured to receive and display WML cards, is considered an "article of manufacture" like that of claim 25.

Conclusion

Applicant's amendment necessitated any new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

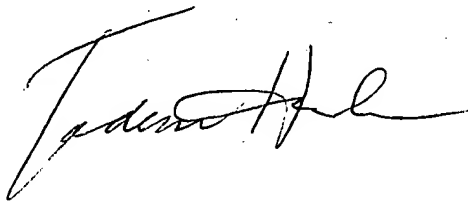
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (571) 272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2173

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btb
3/29/2006

A handwritten signature in black ink, appearing to read "T. J. H. H.", is written over the typed name "T. J. H. H.".